

FIG. 1  
PRIOR ART



魚器作成の図（扶母市立施設施設）  
（早稲宗子開館館による当時の写真図）

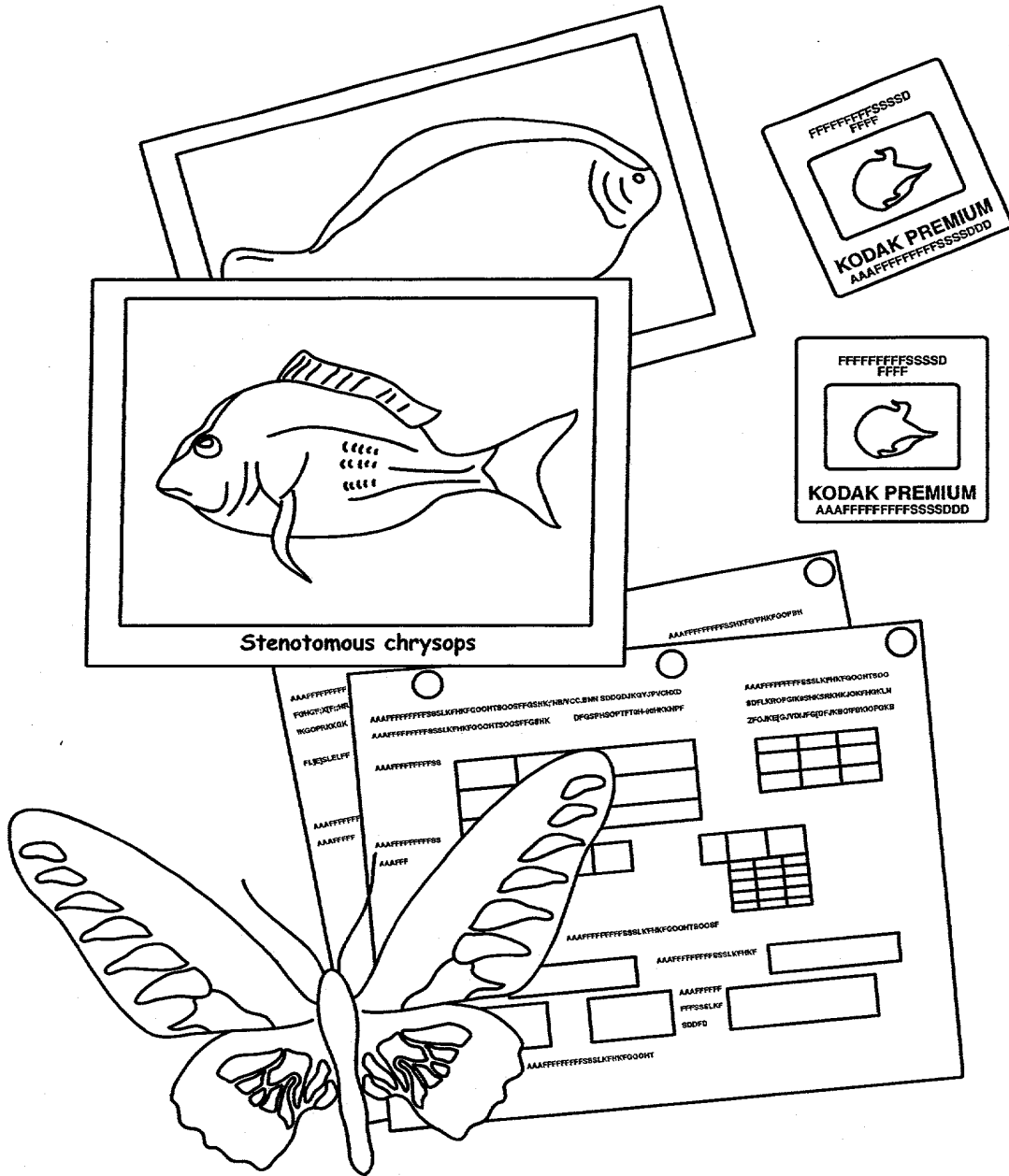


FIG. 2  
PRIOR ART

3/41

**REPORT  
on the  
SCIENTIFIC RESULTS  
of the  
EXPLORING VOYAGE  
of  
H.M.S. CHALLENGER  
1873-76**

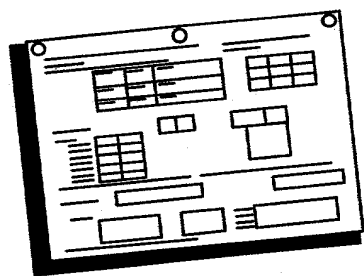
**NOTES ON METHODS FOR THE NARCOTIZATION, KILLING,  
FIXATION, AND PRESERVATION OF MARINE ORGANISMS**

Compiled by Henry D. Russel  
April 1963

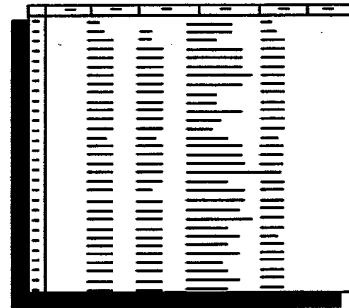
Systematics-Ecology Program  
Marine Biological Laboratory, Woods Hole, Mass.

QL  
62  
R94  
C1

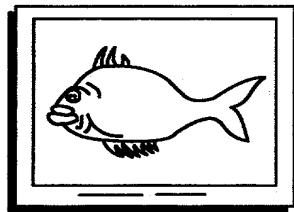
**FIG. 3  
PRIOR ART**



SPECIMEN DATA



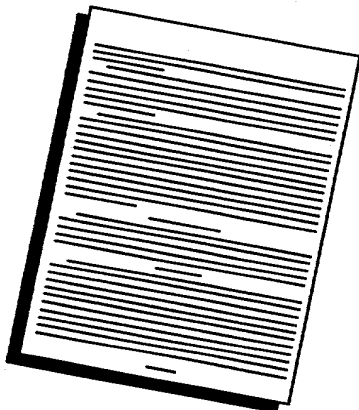
TABLES



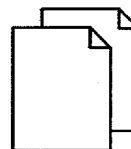
PHOTOS



BINARY OBJECTS



MANUSCRIPT



DOCUMENTS

FIG. 4  
PRIOR ART

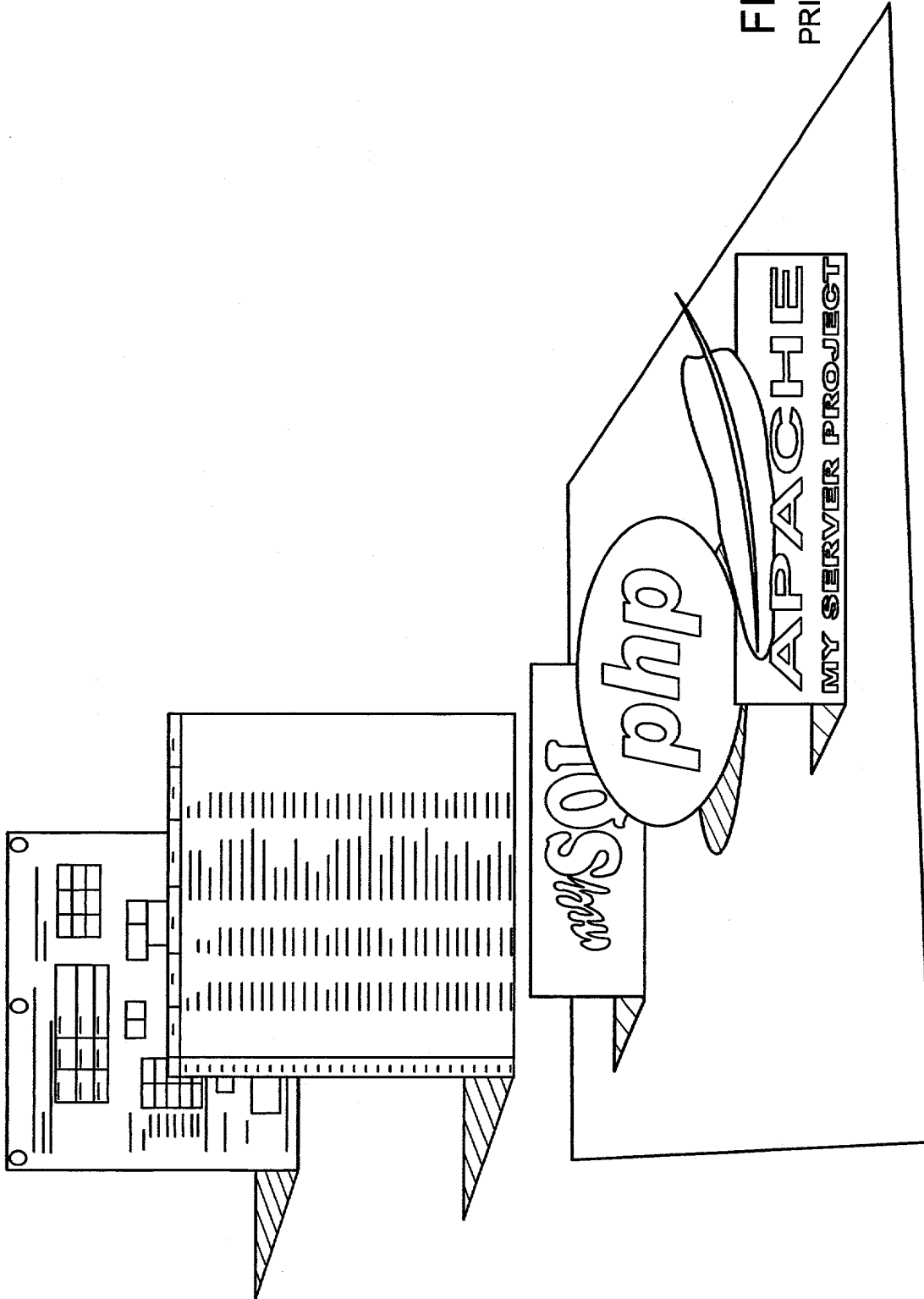


FIG. 5  
PRIOR ART

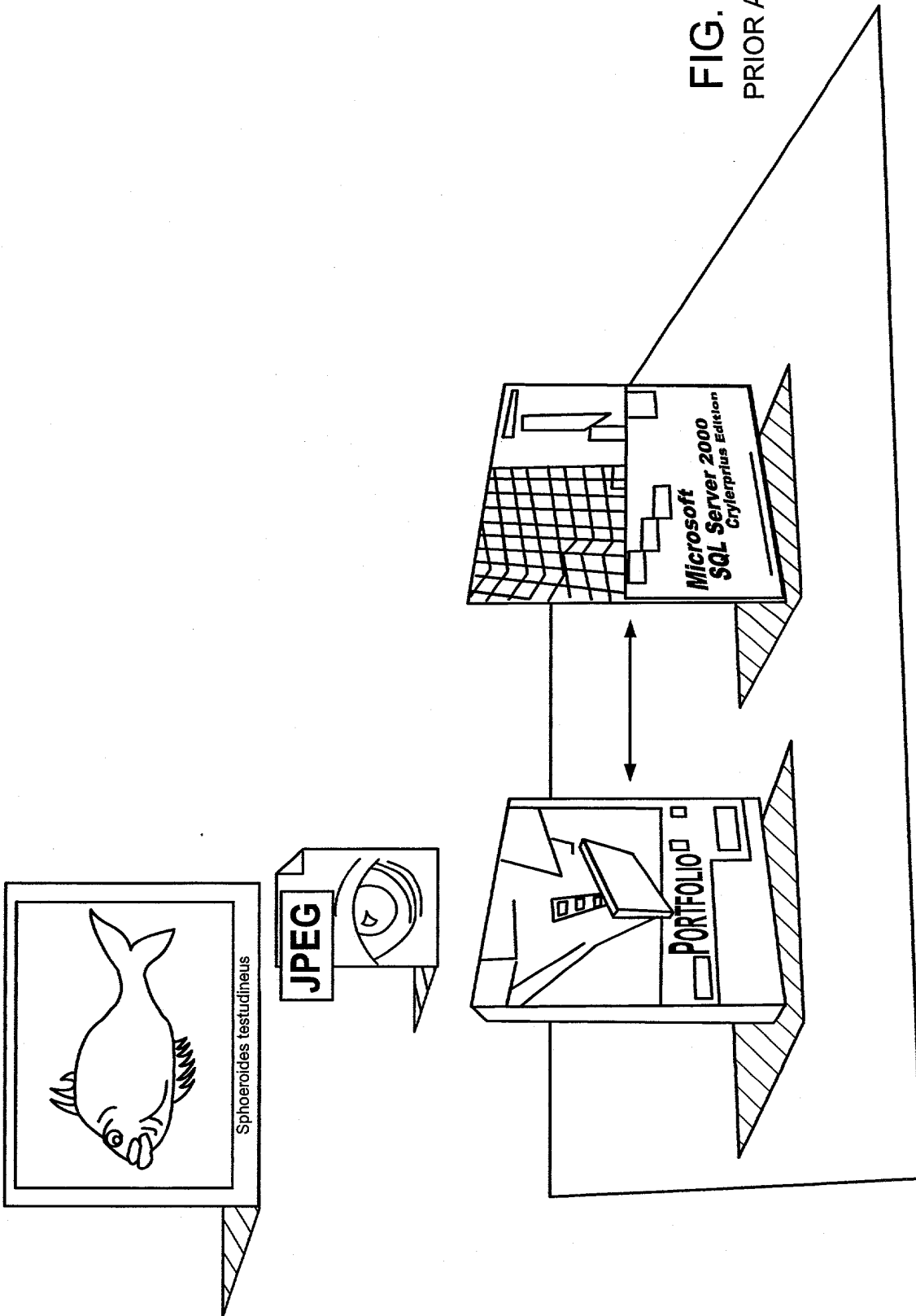


FIG. 6  
PRIOR ART

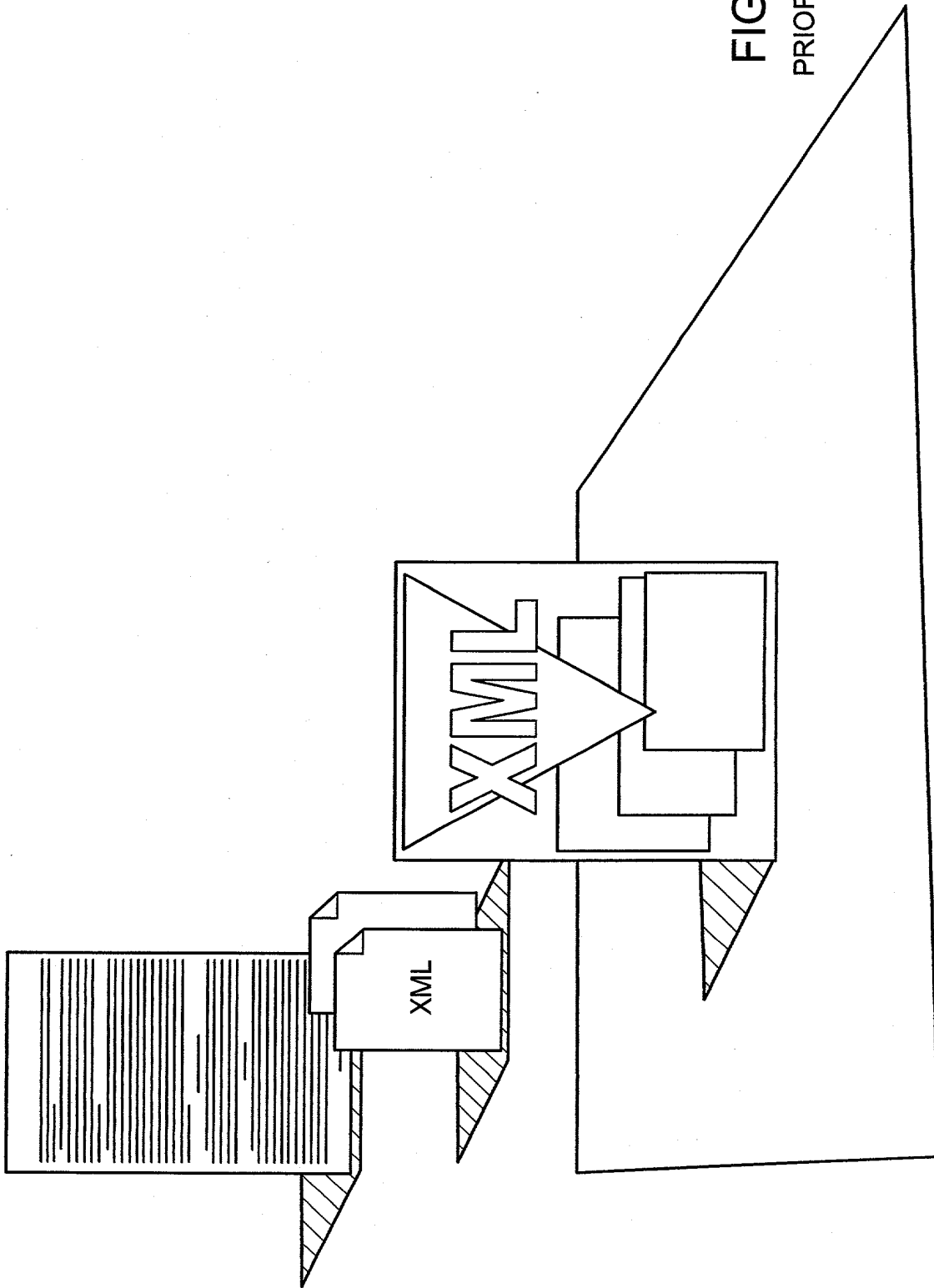
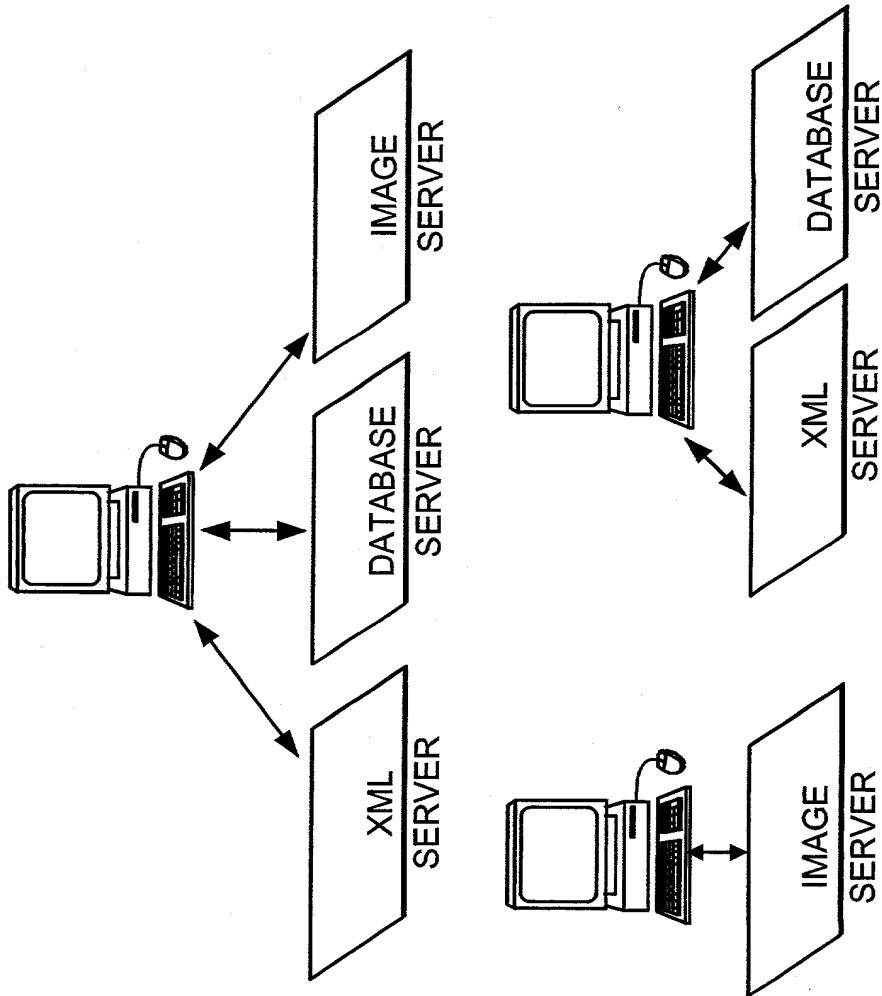


FIG. 7  
PRIOR ART



**FIG. 8**  
PRIOR ART



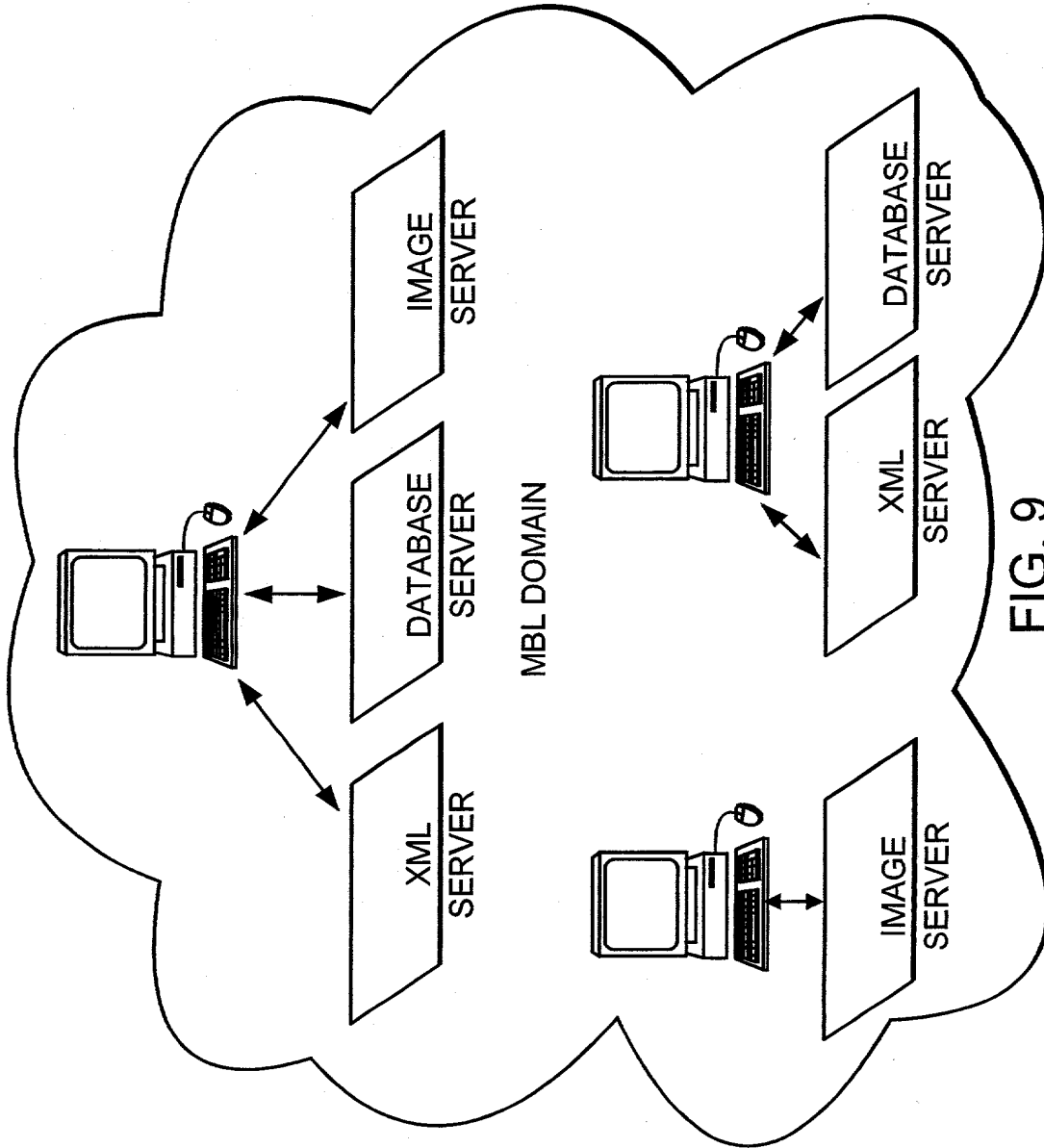


FIG. 9  
PRIOR ART

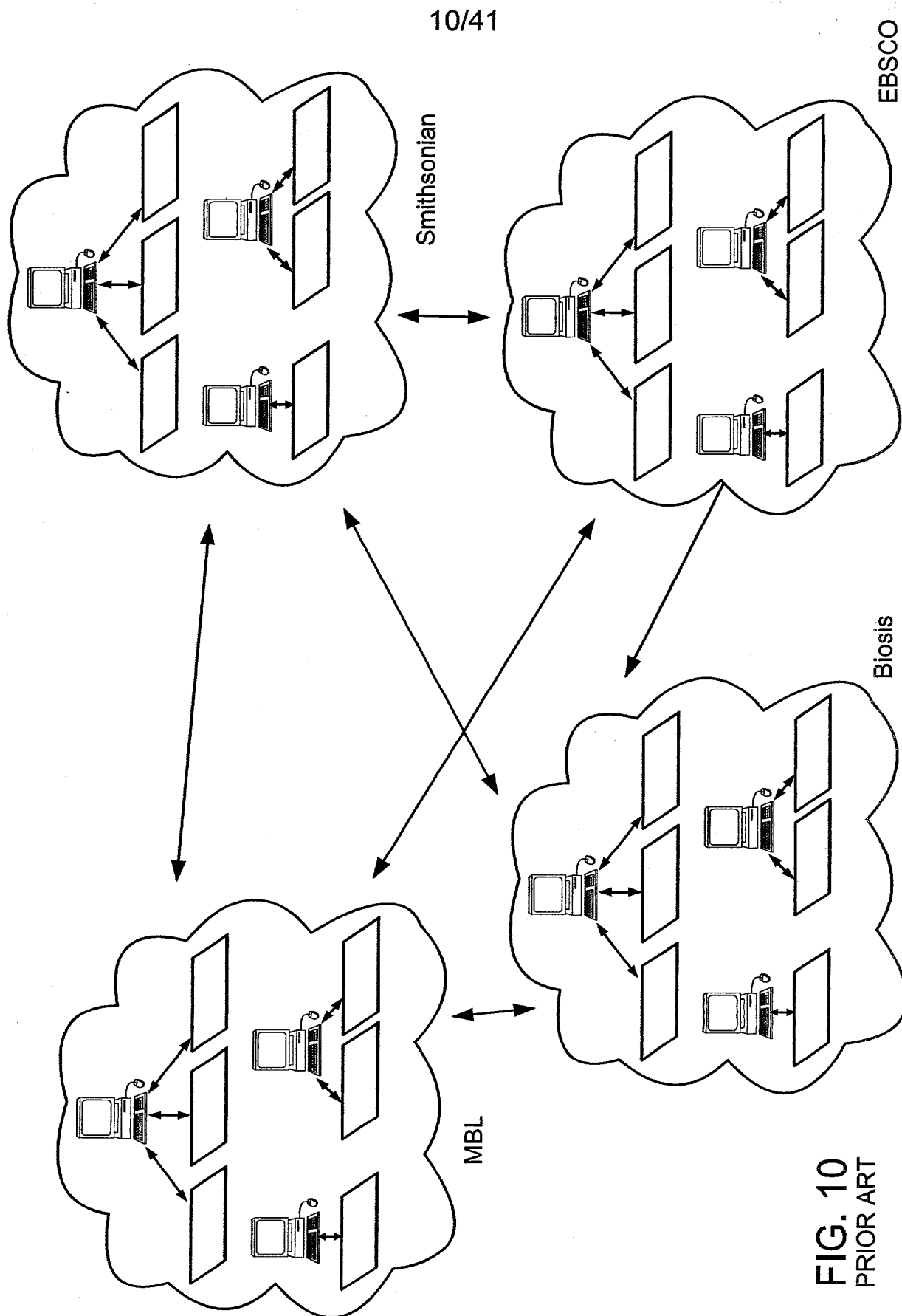


FIG. 10  
PRIOR ART

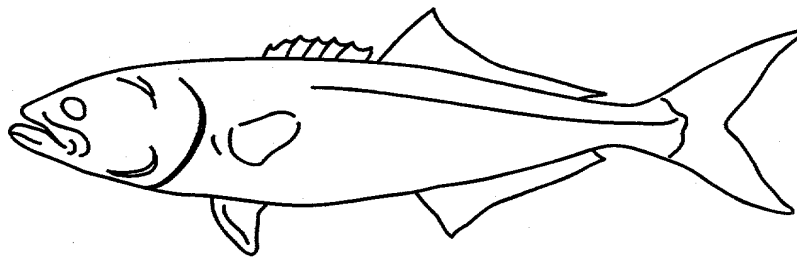


FIG. 11

## . Organisms

## .... Opisthokonts

..... Metazoa

..... Vertebrata

..... Osteichthyes

..... Perciformes

..... Pomatomus

..... Pomatomus saltator

## Animalia

## ..Craniata

## ..... Osteichthyes

## ..... Perciformes

..... Pomatomus

..... Pomatomus saltator

FIG. 12

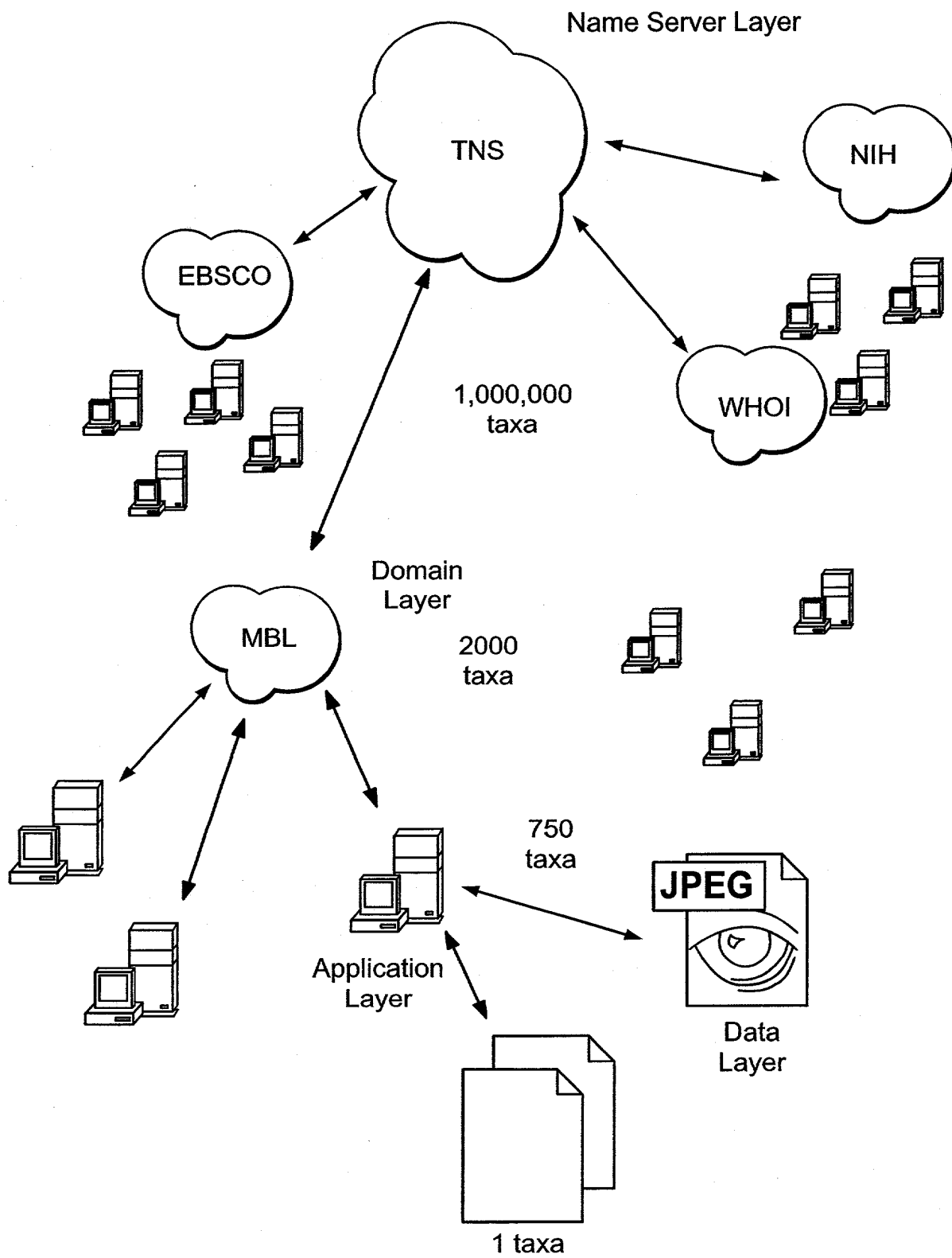


FIG. 13

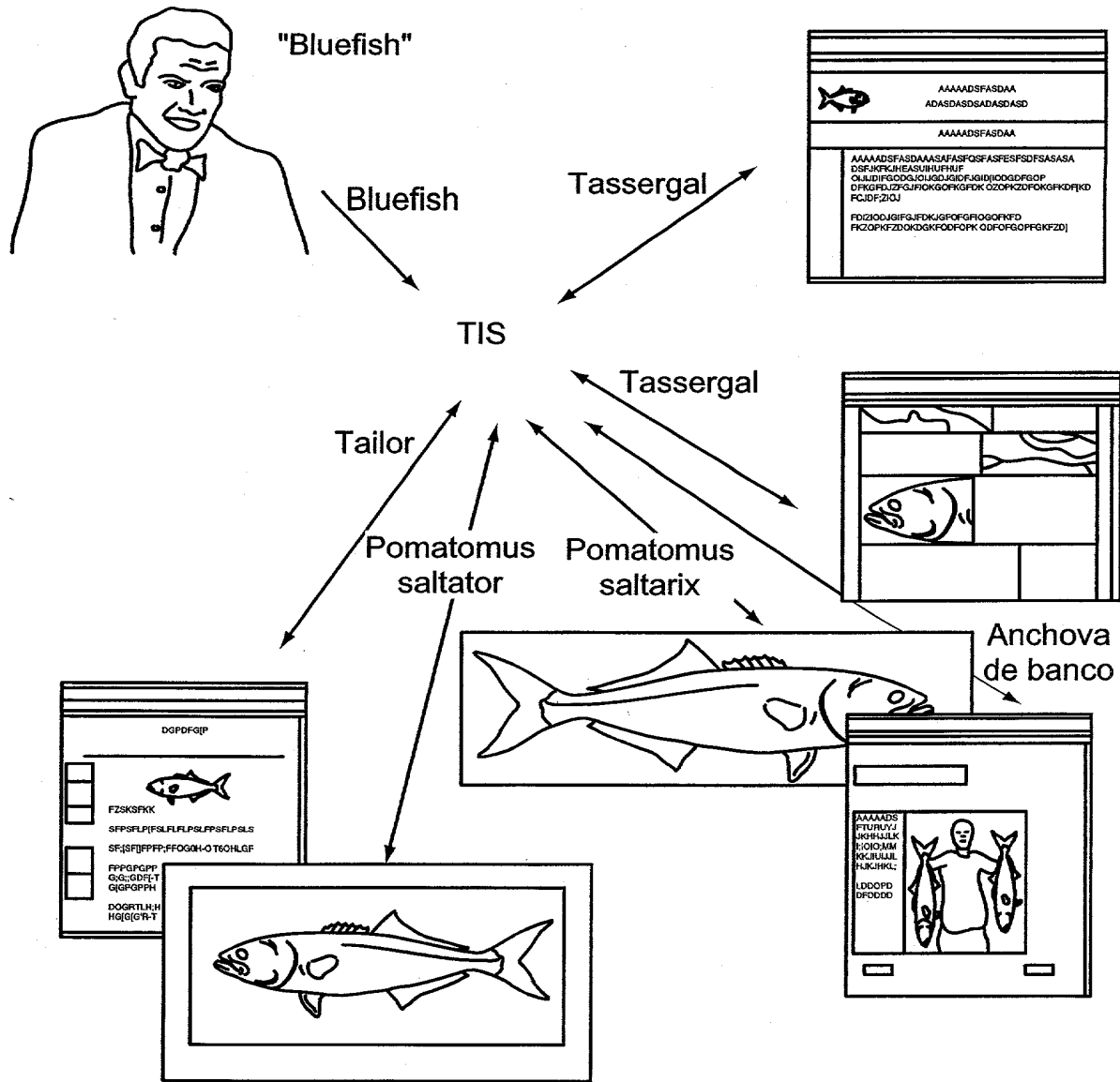
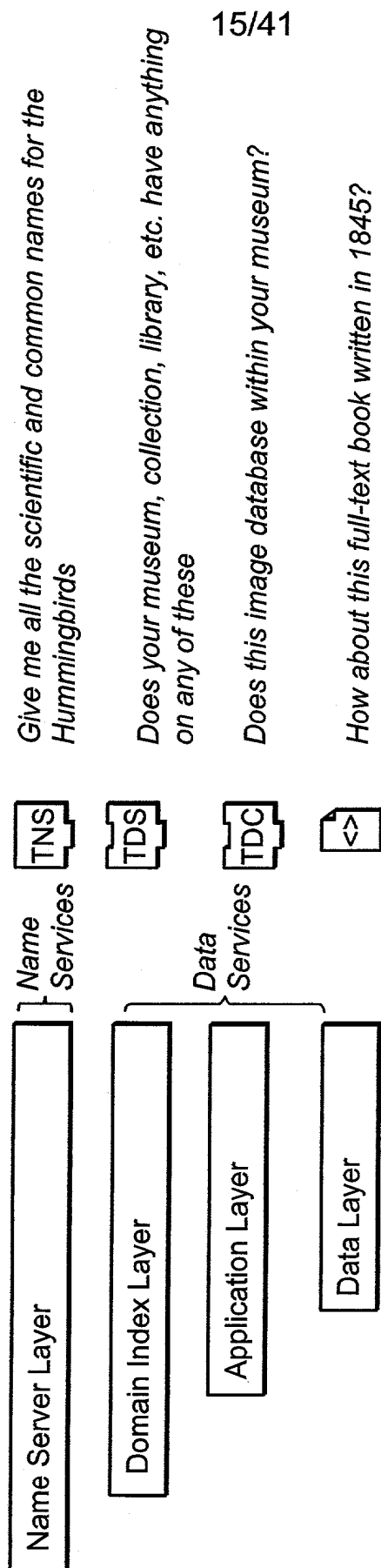


FIG. 14



**FIG. 15**

Scientific names for the bluefish, *Pomatomus saltator*

Cheilodipterus heptacanthus

Cheilodipterus saltatrix

Chromis epicurorum

Gasterosteus saltatrix

Gonenion serra

Lopharis mediterraneus

Perca lophar

Pomatomus pedica

Pomatomus saltator

Pomatomus saltatrix

Pomatomus skib

Scomer sypterus

Sparactodon nalnal

Sypterus pallasii

Temnodon conidens

Temnodon saltator

Temnodon tubulus

Other names

Bluefish (FAO/English)

Tassergal (FAO/French)

Anjova (FAO/Spanish)

Sinikala (Finnish)

Blaufisch (German)

Gofári (Greek)

Pesce serra (Italian)

Amikiri (Japanese)

Anchova (Portuguese)

Plitica (Serbo-Croat)

Strijelka skakusa (Serbo-Croat)

Lüfer (Turkish)

Blue-fish (English)

Anchova (Portuguese)

Bluefish (AFS/English)

Shad (English)

Elf (English)

Tekwaya (Arabic)

Tekwa (Arabic)

Tasergal (Polish)

Teleskopabborre (Swedish)

Dyphavsabbor (Norwegian)

Enchova (Portuguese)

Tailor (English)

Skipjack (English)

Anchova de banco (Spanish)

Elwe (Afrikaans)



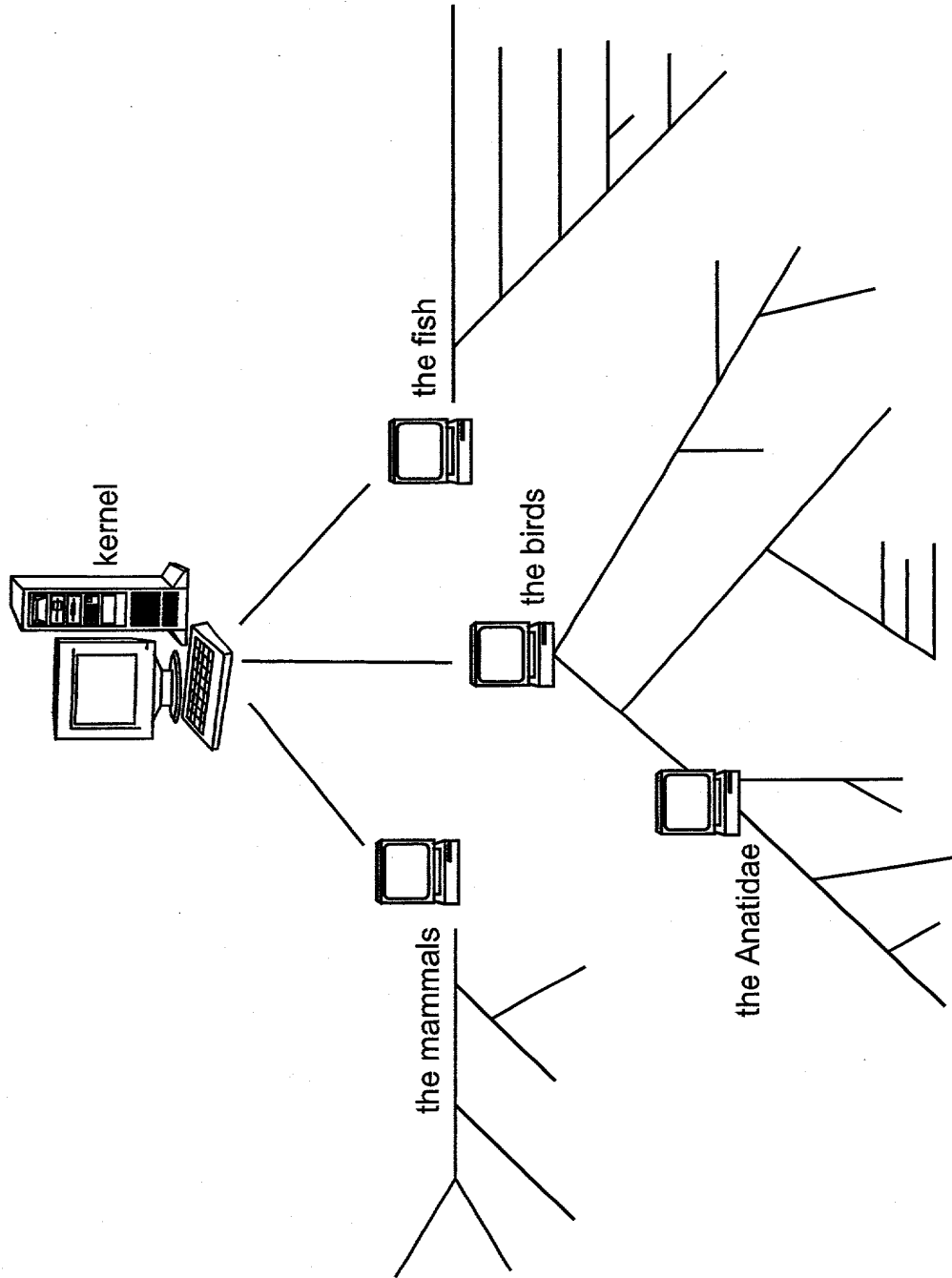


FIG. 17

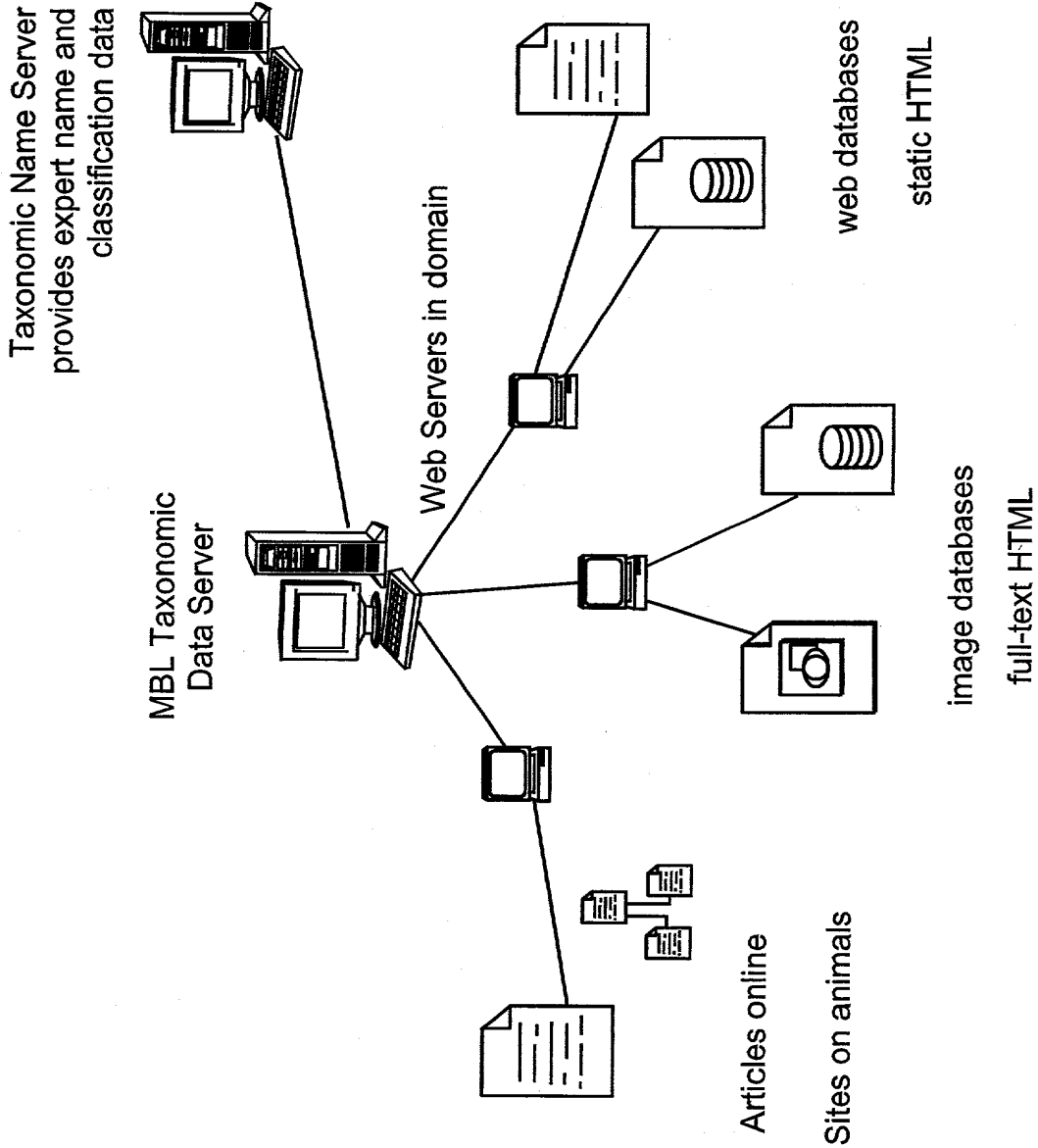
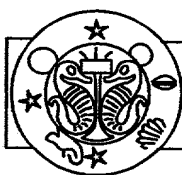


FIG. 18

Function name	What it does
<code>classifications();</code>	returns the canonical list of classifications from the name server
<code>me(\$myID,\$d,\$type,\$l)</code>	returns the name of entity myID according to the type attribute provided
<code>name_types(\$d);</code>	returns a \$d delimited array of name types such as "English,French,ICZN-Current, Synonym, Misspelling, etc.
<code>chroot(\$myID,\$classification)</code>	sets the name server root of the application to \$myID. Sets parent of myID to zero. Allows developers of taxa specific applications to only use relevant parts of the classification
<code>names(\$myID,\$d,\$order,\$l)</code>	returns an ary delimited by string, \$d
<code>children(\$myID,\$d,\$classification,\$type,\$order,\$l)</code>	returns an array of the children on \$myID according to the classification \$classification. Other options include the name type to return, sort order, etc.
<code>parent(\$myID,\$d,\$classification,\$type,\$order,\$l)</code>	Ancestry of \$myID with many output options
<code>list_my_children(\$myID)</code>	A recursive function for dumping tree information.
<code>get_name(\$myID,\$name_type,\$date,ref)</code>	Return a specific name for a taxa such as the French form or the currently accepted name or a junior synonym.
<code>classify(\$myID,\$classification,\$length)</code>	Returns an array of ancestry for a given classification to a given number of steps relative to the taxa. A length of 0 returns to the tree root.
<code>names(\$myID,\$fields)</code>	Returns an array of all names for a given taxonomic entity. Fields returned in the array can be specified.
<code>dump(\$myID,\$delimiter,\$fields,\$classification)</code>	Dumps from myID down in spreadsheet form
<code>pad(\$myID,\$s,\$class,\$root) -</code>	Delimiters used to pad the taxonomic level type. Ex (pad (AR201,"=-","1C",5) outputs "=-=-=-=-=-" because according to classification "1C" this entity (a genus) would be indented six places to correspond to the six levels from the starting point of level "5" (corresponding to "Phylum") from the root of classification 1C.



## MARINE BIOLOGICAL LABORATORY

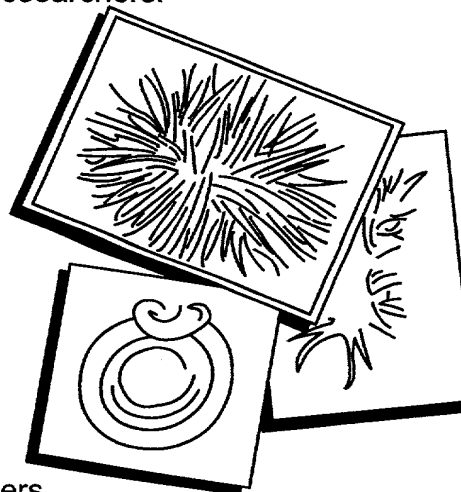
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[directory](#)
[site map](#)
[search](#)


## Marine Animals at the MBL



- .... ▾ **Metazoa ->>**
- ..... ▸ **Annelida** Segmented Worms
- ..... ▸ **Arthropoda** Joint-legged animals
- ..... ▸ **Bryozoa** Moss Animals
- ..... ▸ **Chaetognatha** Arrow Worms
- ..... ▸ **Chordata** Vertebrates and allies
- ..... ▸ **Cnidaria** Coelenterates
- ..... ▸ **Ctenophora** Comb Jellies
- ..... ▸ **Echinodermata** Spiny-skinned Animals
- ..... ▸ **Hemichordata** Acorn Worms
- ..... ▸ **Mollusca** Mollusks
- ..... ▸ **Nemertea** Ribbon Worms
- ..... ▸ **Platyhelminthes** Flatworms
- ..... ▸ **Porifera** Sponges
- ..... ▸ **Sipuncula** Peanut Worms

This database represents approximately 200 species of marine organisms available in our Marine Resources Center and collected by the Aquatic Resources Division. Most of these organisms are available for purchase by qualified educational institutions and researchers.




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Expand from Metazoa down. (560 taxa)

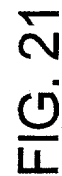
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This program uses the Taxonomic Name Server for name authority information.

Server numbers

Click on grouping at left for a listing of species

FIG. 20



## SUMMARY OF RESULTS

- Cythere crispata*, Brady. Obtained also at Station 187 and Port Jackson.  
 " *cymba*, Brady. Obtained also at Station 233B, 15 fathoms. Recorded from Hong Kong.  
 " *goujoni*, Brady. Obtained also at Station 187 and Port Jackson.  
 " *darwini*, Brady. Obtained also at Station 233B, 15 fathoms. Recorded from Java  
 " *cribriformis*, Brady. Obtained at no other locality by the Challenger.  
*Loxoconcha sinensis*, Brady. Obtained also at Station 233B, 15 fathoms. Recorded from Hong Kong.  
*Bythocythere orientalis*, Brady. Obtained also in Torres Strait.  
*Cytherella cingulata*, Brady. Obtained also at Stations 187, 189, and Port Jackson

## MACRUHA (Spence Bate, Zool. pt 52).

- Alpheus rupax*, Fabricius. One specimen (10 fathoms); obtained at no other locality by the Challenger.  
*Nauticaris unirecedens*, n.g., n.sp. One specimen; obtained at no other locality.

## ANOMURA (Henderson, Zool. pt. 69)

- Spiropagurus spiriger* (De Haan). One specimen in the shell of *Pleurotoma* (10 fathoms); for distribution see Torres Strait.  
*Porcellana serratifrons*, Stimson. One specimen (10 fathoms); obtained also in Arafura Sea.  
*Rephidopus ciliatus*, Stimpson. One specimen (10 fathoms); obtained at no other locality by the Challenger. Recorded from Hong Kong.

## BRACHYCRA (Miers, Zool. pt. 49)

- Neptunas (Amphitrite) hastatoides* (Fabricius). Several Specimens (10 fathoms); obtained also at Stations 188, 233B, and Japan.  
*Goniosoma cruciferum* (Fabricius). One specimen (7 fathoms); obtained at no other locality by the Challenger.  
*Arcunia septemspinosa* (Fabricius). Three specimens (10 fathoms) obtained also at Station 233B, 16 fathoms, and Japan.  
*Leucosia craniolaris* (Linué). Two specimens (10 fathoms); obtained also at Stations 188, 190, and Japan.  
*Dorippe facchino* (Herbst). One specimen (10 fathoms); obtained at no other locality by the Challenger.

## GASTEROPODA (Watson, Zool. pt. 42).

- Pleurotoma (Surcula) tuberculata*, Gray. (10 fathoms); obtained also in Arafura Sea.

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growth

June, whereas the contain only smaller eggs after the early part of July, No individual, however, is actually known to have given birth to two broods in a single summer.

The sand shark, *Carcharias Littoralis*, the most common shark at Woods Hole during the summer, so far as I know, has never been taken during the breeding season all the individuals being apparently imma

FIG. 23

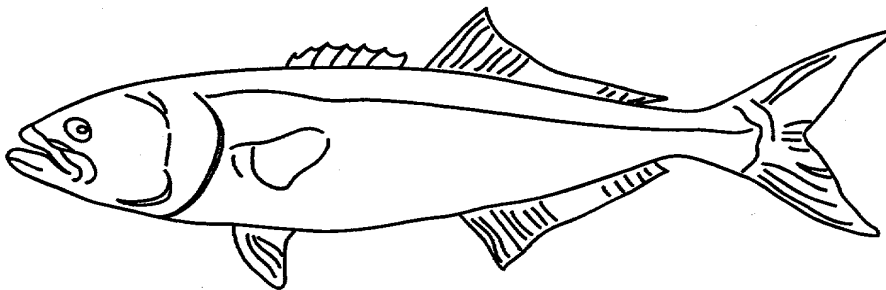
The Bluefish, *Pomatomus saltator*

FIG. 24

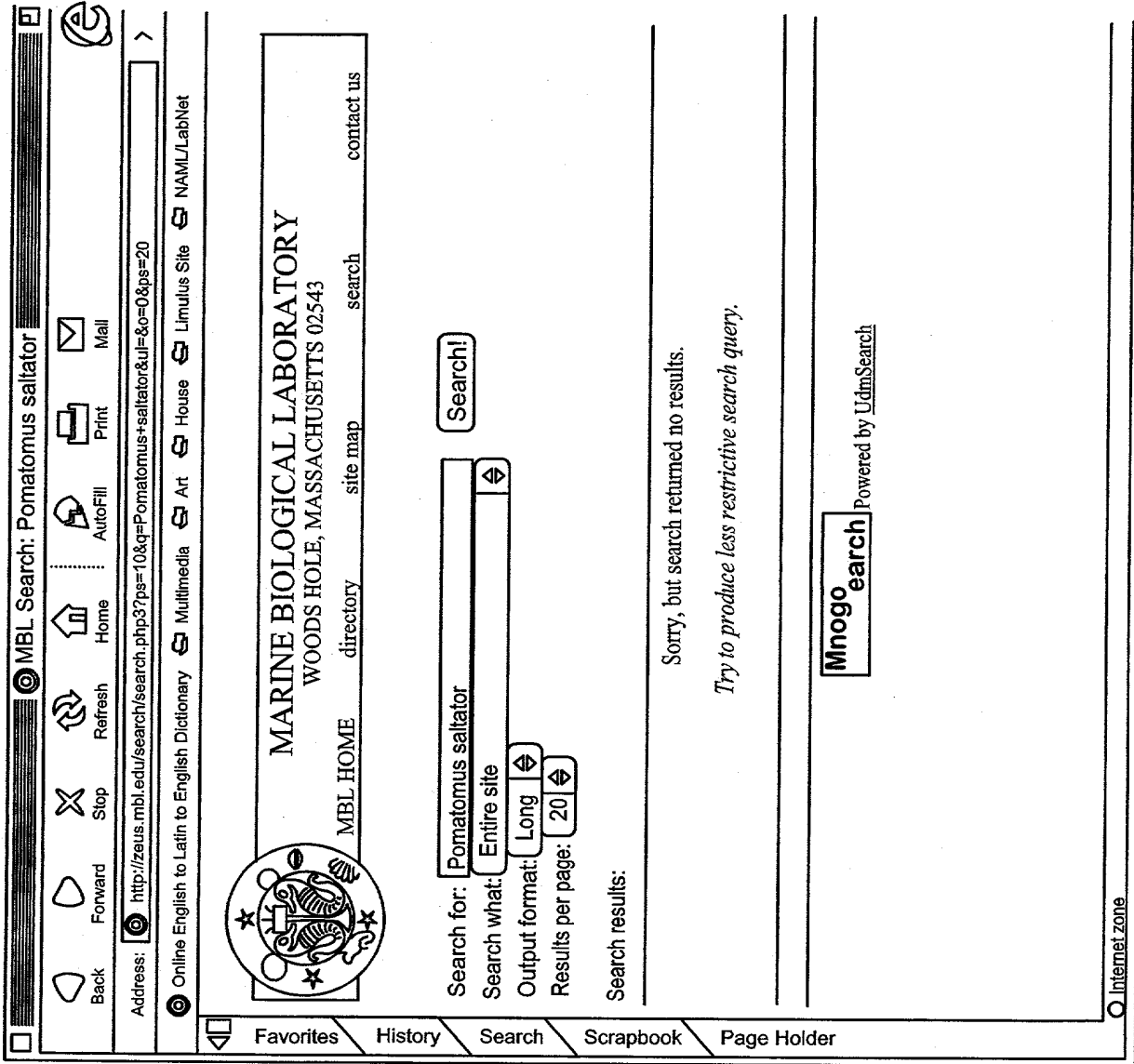


FIG. 25



www.fishbase.org

www.fishbase.org



Common Names of *Pomatomus saltator*

Synonyms of *Pomatomus saltator*

Synonym	Author	Status
<i>Pomatomus saltator</i>	(Lumaeus, 1766)	misspelling
<i>Gasterosteus saltator</i>	(Lumaeus, 1766)	original combination
<i>Pomatomus saltator</i>	(Lumaeus, 1766)	new combination
<i>Terminadors saltator</i>	(Lumaeus, 1766)	new combination
<i>Pomatomus saltator</i>	(Lumaeus, 1766)	new combination
<i>Ckestadipiterics saltator</i>	(Lumaeus, 1766)	new combination
<i>Perca lophas</i>	Fomold, 1775	junior synonym
<i>Ckestadipiterics heptocarkitins</i>	Lacepede, 1801	junior synonym
<i>Pomatomus sitrub</i>	Lacepede, 1802	junior synonym
<i>Lapharis mechteranensis</i>	Rafresque, 1810	junior synonym
<i>Garrlerison serra</i>	Rafresque, 1810	junior synonym
<i>Scamer nyterus</i>	Pallas, 1814	junior synonym
<i>Sypterus pallaris</i>	Eschwalds, 1831	junior synonym
<i>Chironmis splerororum</i>	Crimmaw, 1864	junior synonym
<i>Terminadors coniderus</i>	Caeselnau, 1861	junior synonym
<i>Sparactodon nainai</i>	Rochebrune, 1880	junior synonym
<i>Terminadors tubvilus</i>	Saville Kent, 1893	other

Bluefish (E)  
Pomatomus saltator (LVN)  
Cheilodipterus heptacanthus (Syn)  
Cheilodipterus saltatrix (Syn)  
Chromis epicurorum (Syn)  
Gasterosteus saltatrix (Syn)  
Gonenion serra (Syn)  
pharis mediterraneus (Syn)  
Perca lophar (Syn)  
Pomatomus pedica (Syn)  
Pomatomus saltatrix (Syn)  
omus skib (Syn)  
r sypterus (Syn)  
don nainal (Syn)  
us pallasii (Syn)  
condens (Syn)  
on saltator (Syn)  
on tubulus (Syn)  
Chopper (E)  
Tailor (E)  
napper Blue (E)  
Amikiri (Jap)  
Ach'ked (Arab)  
Anchova (Port)  
a de banco (Sp)  
Anjova (Sp)  
Blaufisch (Ger)  
Blue-fish (E)  
havsaborr (Nor)  
Elf (E)  
Elwe (Afri)  
Enchova (Port)  
Gófari (Gree)  
Lüfer (Turk)

FIG. 26

Pesce s  
Plitica (  
Shad (E  
Sinikala  
Skipjack  
Strijelka skakus  
Tasergal (Poli)  
Pomatomus sa  
Tassergak (Fr)  
Tekwa (Arab)  
Tekwaya (Arab)  
Teleskopaborre (Sw)

.....SuperClass Pisces  
 .....Class Actinopterygii  
 .....Order Perciformes  
 .....Family Pomatomidae  
 .....Genus Pomatomus  
 .....Binomen Pomatomus saltator

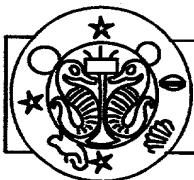


### Common Names of *Pomatomus saltator*

### Synonyms of *Pomatomus saltator*

Synonym	Author	Status
<u>Pomatormises saltator</u>	<u>(Lumaeus, 1766)</u>	misspelling
<u>Gasterosieus saltator</u>	<u>(Lumaeus, 1766)</u>	original combination
<u>Pomatormises saltator</u>	<u>(Lumaeus, 1766)</u>	new combination
<u>Teminadors saltator</u>	<u>(Lumaeus, 1766)</u>	new combination
<u>Pomatormises saltator</u>	<u>(Lumaeus, 1766)</u>	new combination
<u>Ckiesadipteris saltator</u>	<u>(Lumaeus, 1766)</u>	new combination
<u>Ferca lophas</u>	<u>Formold, 1775</u>	junior synonym
<u>Ckiesadipteris heptocartkins</u>	<u>Lacepede, 1801</u>	junior synonym
<u>Pomatormises sitrub</u>	<u>Lacepede, 1802</u>	junior synonym
<u>Lapharis mechiterrenans</u>	<u>Rafresque, 1810</u>	junior synonym
<u>Garrirson sema</u>	<u>Rafresque, 1810</u>	junior synonym
<u>Scamer rypterus</u>	<u>Pallas, 1814</u>	junior synonym
<u>Sypterus pallaris</u>	<u>Eschwalds, 1831</u>	junior synonym
<u>Chronmis spieroroum</u>	<u>Crimmaw, 1864</u>	junior synonym
<u>Teminadors condiderus</u>	<u>Caesselhau, 1861</u>	junior synonym
<u>Speractodon nalnal</u>	<u>Rochebrune, 1880</u>	junior synonym
<u>Teminadors tubvulus</u>	<u>Saville Kent, 1893</u>	other

FIG. 27



## MARINE BIOLOGICAL LABORATORY

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Search for: Search what: Output format: Results per page: 

Search results:

Displaying documents 1-4 of total 4 found.

1. Macrofauna description [2]

Description of the Macrofauna in Plum Island Sound Macrofauna are abundant and diverse throughout the Plum Island Sound estuary. Twenty eight species of fish have been recorded in the brackish to marine areas and another 10 from the freshwater portion....

• <http://ecosystems.mbl.edu/PIE/data/HTL/HTLDescription.htm> (text/html) Wed, 19 Jul 2000 15:11:39 GMT, 3406 bytes

2. No title [2]

DATE STATION STATE X STATE Y LAT LON SPECIES TOTAL WEIGHT 23-Sep-1993 HTL-PR-21 247524.8 944832.3 42.75263608 70.91949172 Alosa aestivalis 1 1.2 20-Oct-1993 HYL-PR-21 247524.8 944832.3 42.75263608 70.91949172 Apeltes quadracus 1 0.6 23-Nov-1993 HTL-P...

• <http://ecosystems.mbl.edu/PIE/data/HTL/HTL-PR-Survey.txt> (text/html) Wed, 19 Jul 2000 14:53:41 GMT, 174862 bytes

3. No title [2]

STATION STATE X STATE Y LAT LON SAL SITE NAME SCI NAME 15N 13C 34S HTL-SO-3(Knob) 257402.95 942546.27 42.73139029 70.79906604 30 MID sand shrimp Crangon septemspinosa 10.5 -16.3 8.6 HTL-SO-5(Sub Headquarters) 256334.1 945265.44 42.75594527 70.81184907...

• <http://ecosystems.mbl.edu/PIE/data/HTL/HTL-PR-Isotope.txt> (text/html) Wed, 19 Jul 2000 14:18:16 GMT, 8767 bytes

4. No title [2]

Plum Island Ecosystem Long Term Ecological Research (PIE-LTER) LMER Intercomparison Stable Isotope Data Set Updated 2/14/97 Organic matter Real/measured Forward model stable isotope data Budgets stable...

• <http://ecosystems.mbl.edu/PIE/data/STP/STP-VA-OMInterisotope.txt> (text/html) Wed, 19 Jul 2000 15:18:07 GMT, 20535 bytes

MBL Name Server

412 species

14 phyla

1127 names

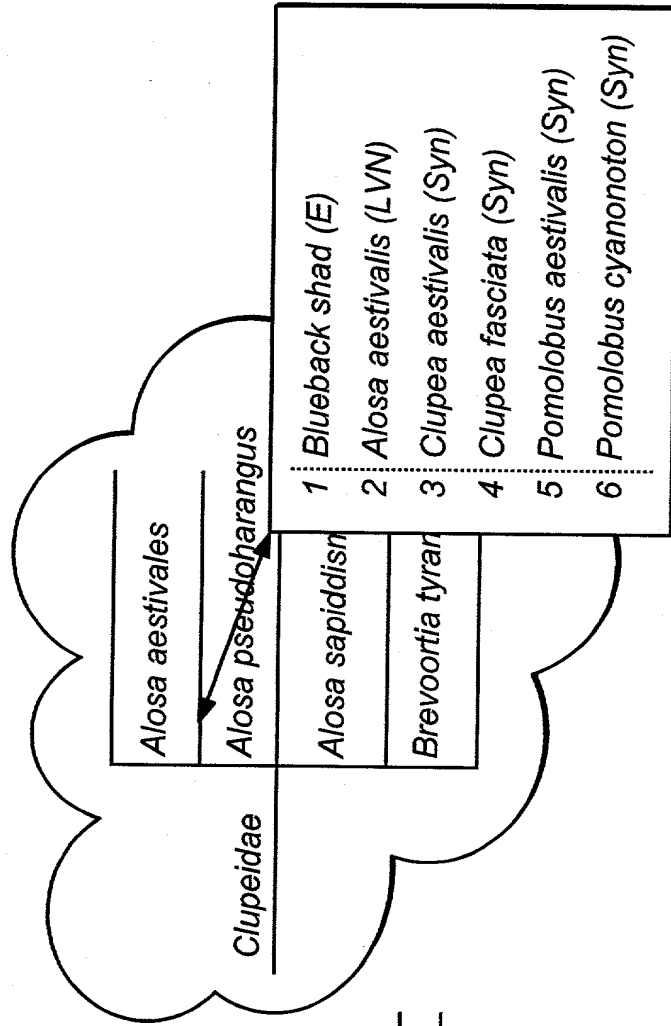
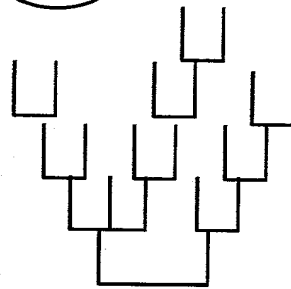
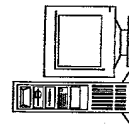
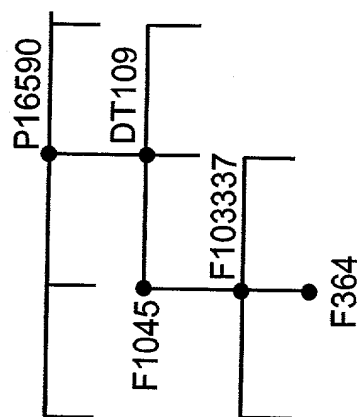


FIG. 29



Classification: ICLARM:FishBase	
.....SuperClass Pisces	
.....Class Actinopterygii	
.....Order Perciformes	
.....Family Pomatomidae	
.....Genus Pomatomus	
.....Binomen Pomatomus saltator	
Names:	
Bluefish (E)	
Pomatomus saltator (LVN)	
Cheilodipterus heptacanthus (Syn)	
Cheilodipterus saltatrix (Syn)	
Cromis epicurorum (Syn)	
Gasterosteus saltatrix (Syn)	
...	
Links: <u>Pomatomus saltator</u>	
MBL	
<u>Database of Marine Organisms</u>	
<u>The Flescher Slides Collection</u>	
<u>The Biological Bulletin Citations Database</u>	
<u>MRC Catalog of Specimens</u>	
<u>Compendium of Eggs and Embryoes</u>	
<u>The Teaching Charts of Rudolph Leuckar</u>	

FIG. 30



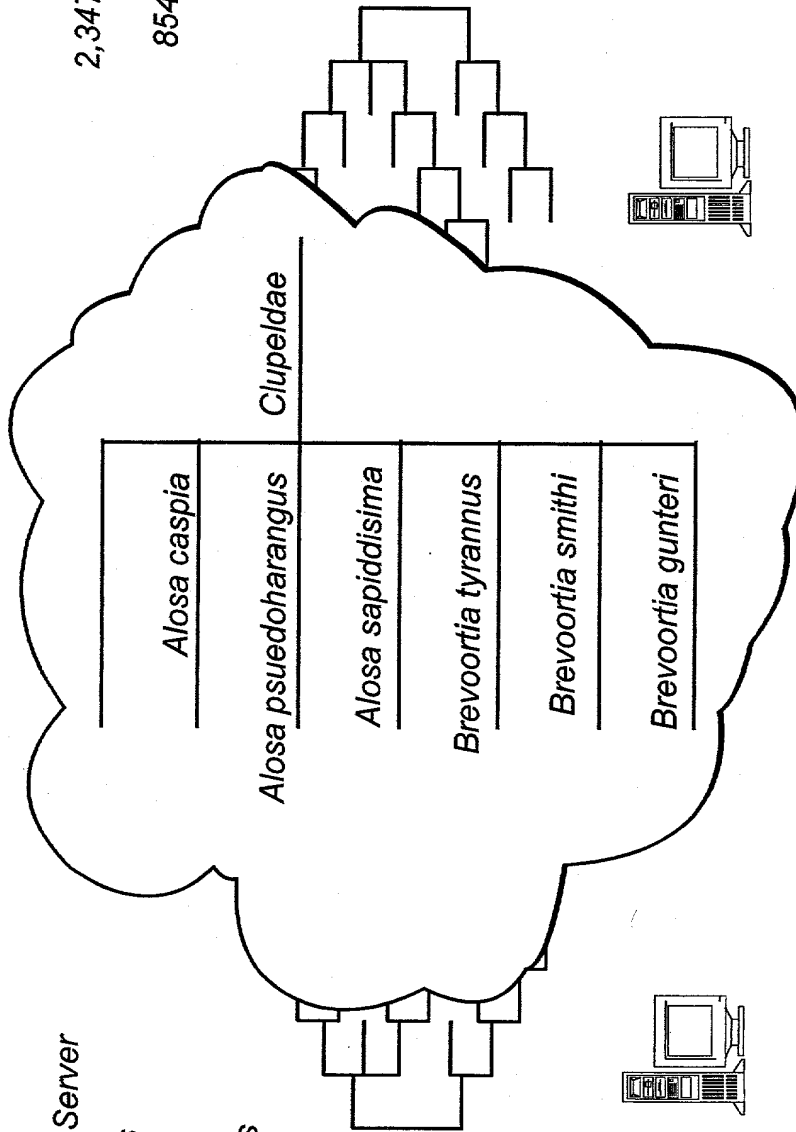
**Classification: C109**

<u>myID</u>	<u>name</u>	<u>type</u>
38631	Bluefish	E
59825	Pomatomus saltator	L
73467	Cheilodipterus heptacanthus	Syn
73482	Cheilodipterus saltatrix	Syn
73995	Chromis epicurorum	Syn
81129	Gasterosteus saltatrix	Syn
82464	Gonionion serra	Syn
87746	Lopharis mediterraneus	Syn
94245	Perca Lophar	Syn
96363	Pomatomus pedica	Syn
96364	Pomatomus saltatrix	Syn
96365	Pomatomus skib	Syn
100411		Syn
101901		
103298		
103504		
103506		
103507		
106382		
106383		
106384		
39257		
61228		
77719		
77720		
78438		
41109		

FIG. 31

FIG. 31

WHOM  
2,347 species  
15 phyla  
8543 names



MBL Name Server  
412 species  
14 phyla  
1127 names

FIG. 32

Small vertical text on the left margin, possibly a page number or reference.

Classification: ICLARM:FishBase

- ....SuperClass **Pisces**
- .....Class **Actinopterygii**
- .....Order **Clupeiformes**
- .....Family **Clupeidae**
- .....Genus **Brevoortia**
- .....Binomen **Brevoortia tyrannus**

Names:

- Atlantic menhaden (E)
- Brevoortia tyrannus (L)
- Clupea carolinensis (Syn)
- Clupea menhaden (Syn)
- Clupea neglecta (Syn)
- Clupea tyrannus (Syn)

Links: Brevoortia tyrannus

- MBL
- Database of Marine Organisms
- The Flescher Slides Collection
- The Biological Bulletin Citations Database
- MRC Catalog of Specimens
- Compendium of Eggs and Embryoes
- The Teaching Charts of Rudolph Leucka?
- Woods Hole Oceanographic Institution
- Discovery: The Salt Marsh
- Mariner Library Catalog
- Oceanus Magazine: Oct 1983 Issue
- JASON Project, 1997 Fisheries Worldw?
- Laboratory of Dr. Peter Cummins

FIG. 33



Small text at the top of the page, likely a header or navigation bar.

ASTROBIOLOGY

microscope

sites Browse Alphabetical

Find  Find

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |

- Mallomonas
- Marineamoeba
- Markshotair
- Massistena
- Mastigamoeba
- Mastigella
- Mayorella
- Melosira
- Merismopedia
- Mesodinium
- Metacoronynympha
- Metanema
- Metromonas
- Micrasterias
- Micrachiamys
- Microcometes
- Microhabitat
- Microscape
- Mite
- Mite
- Monas
- MONOCERCOMONADINAE
- Mothscale
- Motilebact
- Motilebactdet

found 4 images matching Massisteria

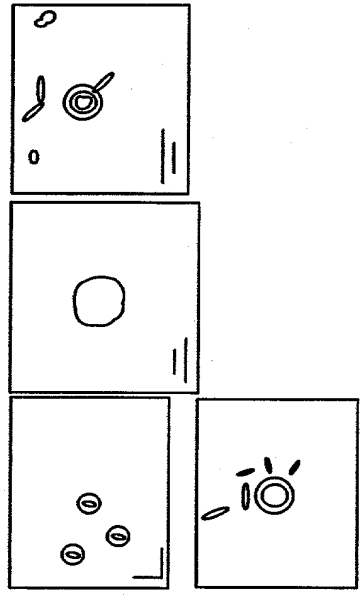


FIG. 34

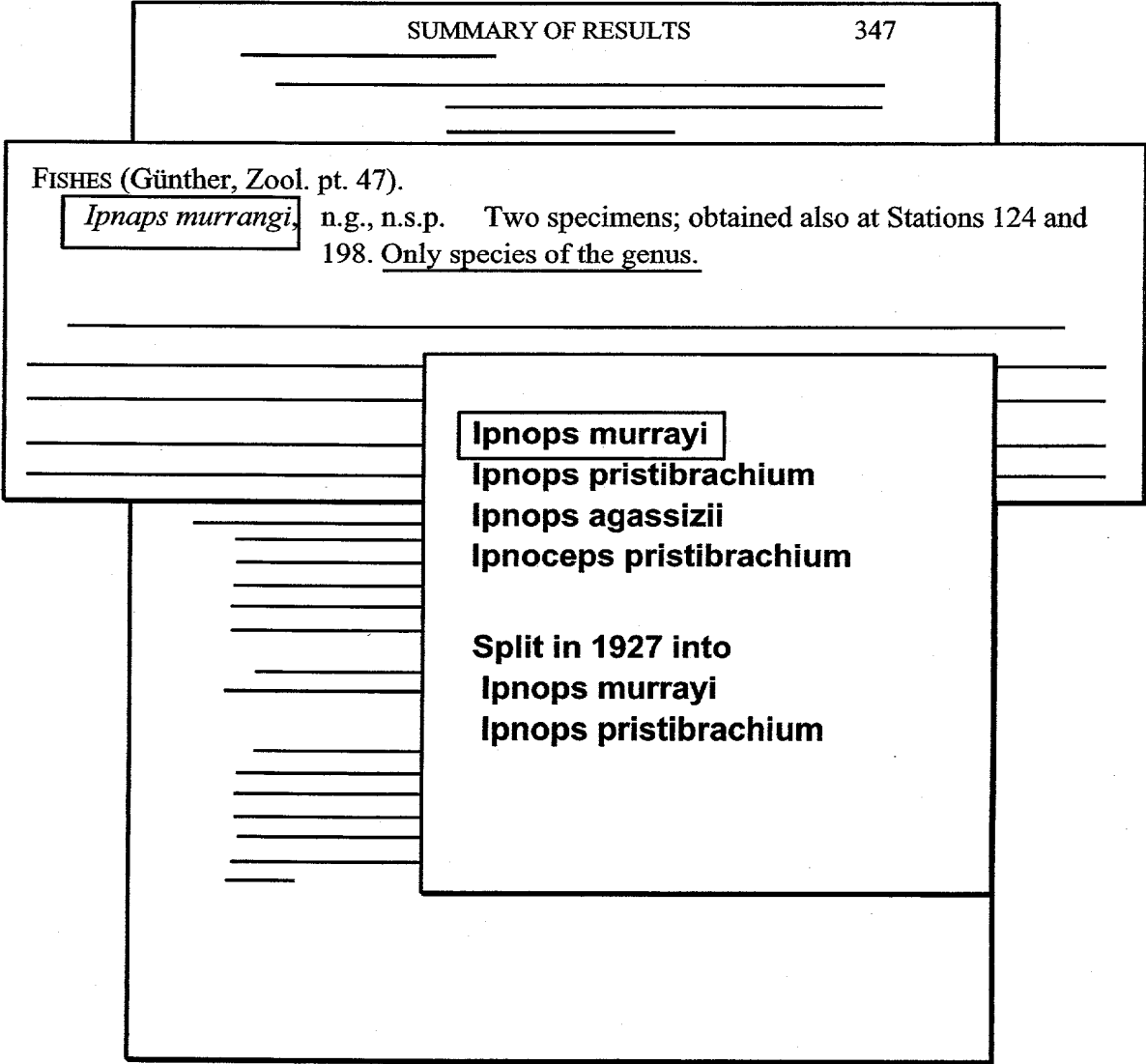


FIG. 35

FIG. 36A
FIG. 36B
FIG. 36C

FIG. 36

dTNS (distributed Taxonomic Name Server)

Documentation

Jump to: Vertebrates/Fish

Mammals/Birds/Reptiles

Server Numbers

Name

Find

- .... Organisms (C1)
- ..... Eukaryote (P1)
- .....2 Opisthokonts (P2673)
- .....3 Choanoflagellates And Animals (P2674)
- ..... Metazoa (D1)
- ..... Chordata (D1537)
- ..... Vertebrata (D1543)
- ..... Gnathostomata (D1547)
- ..... Osteichthyes (D1555)
- .....Class Actinopterygii (F192005)
- .....Order Perciformes (F180037)
- .....Family Pomatomidae (F175393)
- .....Genus Pomatomus (F103337)
- .....Binomen Pomatomus saltator Entrez (F364) ()

Names:

Bluefish (E)

Pomatomus saltator (L)

Cheilodipterus heptacanthus (Syn)

FIG. 36A

Cheilodipterus saltatrix (Syn)  
Chromis epicurorum (Syn)  
Gasterosteus saltatrix (Syn)  
Gonenion serra (Syn)  
Lopharis mediterraneus (Syn)  
Perca lophar (Syn)  
Pomatomus pedica (Syn)  
Pomatomus saltatrix (Syn)  
Pomatomus skib (Syn)  
Scomer sypterus (Syn)  
Sparactodon nahnal (Syn)  
Sypterus pallasii (Syn)  
Temnodon conidens (Syn)  
Temnodon saltator (Syn)  
Temnodon tubulus (Syn)  
Chopper (E)  
Tailor (E)  
Snapper Blue (E)  
Tassergal (FR)  
Anjova (Sp)  
Sinikala (Fi)  
Blaufisch (Gr)  
Gofári (Gk)  
Pesce serra (It)  
Amikiri (Jp)  
Anchova (Pr)

FIG. 36B

Plitica (SC)  
 Strijelka skakusa (Serb)  
 Lüfer (Tk)  
 Blue-fish (E)  
 Anchova (Pr)  
 Shad (E)  
 Elf (E)  
 Tekwaya (Ar)  
 Tekwa (Ar)  
 Tasergal (Po)  
 Teleskopabborre (Sw)  
 Dyphavsabbor (No)  
 Enchova (Pr)  
 Skipjack (E)  
 Anchova de banco (Sp)  
 Elwe (Af)



Data Views: <u>explode</u>			Level: <input type="text" value="species"/>	SQL outputs: parent/child & columns : Pending
Delimiter: <input type="text" value=":"/>				

FIG. 36C

## Various output formats served by the Name Server layer via a Taxonomic Name Server

<p>A table of all names and their qualifiers</p> <p>tns -nq "Name/Qualifier" -t-name "Pomatomus saltatrix"</p> <p>Name                      Qualifier</p> <p>Bluefish                      (E)</p> <p>Pomatomus saltator (L)</p> <p>Cheilodipterus heptacanthus (Syn)</p> <p>Cheilodipterus saltatrix (Syn)</p> <p>Chromis epicurorum (Syn)</p>	<p>A string containing the preferred name</p> <p>tns -pv -name "Pomatomus saltatrix" -s</p> <p>Pomatomus saltator</p>	<p>A table with a specified list of taxa levels and the preferred name</p> <p>tns -c,pv,l "Kingdom,Phylum,Class,Order,Family,Genus,Species" -name "Pomatomus saltatrix"</p> <p>Kingdom                      Eukaryota</p> <p>Phylum                      Chordata</p> <p>Class                      Actinopterygii</p> <p>Order                      Perciformes</p> <p>Family                      Pomatomidae</p> <p>Genus                      Pomatomus</p>	<p>The full ICZN classification with "##" as a delimiter</p> <p>tns -c,pv,a -name "Pomatomus saltatrix" -l-t##</p> <p>EUKARYOTES##Living_Organisms Kingdom##</p> <p>SubKingdom##OPISTHOKONTS ParvPhylum##Metazoa</p> <p>Phylum##Chordata Subphylum ##Vertebrata</p> <p>Superclass## Gnathostomata Class##Osteichthyes</p> <p>subClass##Actinopterygii SuperClass##Pisces</p> <p>Class##Actinopterygii Order##Perciformes</p>
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FIG. 37A

Various output formats served by the Name Server layer via a Taxonomic Name Server			
Gasterosteus saltatrix  (Syn)		Species  saltatrix  or the same table with common English names  tns -c,ce,l "Kingdom,Phylum,Class,Order,Family, Genus,Species" -name "Pomatomus saltatrix" -t:	Family##Pomatomidae Genus##Pomatomus Species##saltator
Gonion serratus  (Syn)			
Lopharis mediterraneus  (Syn)		Kingdom: EUKARYOTES	
Perca lopharis  (Syn)		Phylum: Animals with Backbones	
Pomatomus pediculus  (Syn)		Class: Ray-finned Fish	
Pomatomus saltatrix  (Syn)		Order: Perches and Allies	
Pomatomus skibum  (Syn)		Family: Bluefish Family	
Scomer sypterus  (Syn)		Genus: Bluefish	
Sparactodon nallal  (Syn)		Species: Bluefish	
Sypterus pallasii  (Syn)			

FIG. 37B

Various output formats served by the Name Server layer via a Taxonomic Name Server			
Temnodon conidens (Syn)			
Temnodon saltator (Syn)			
Temnodon tubulus (Syn)			
Chopper (E)			
Tailor (E)			
Snapper Blue (E)			



AR1001 POMATOMUS SALTATRIX HTTP://ZEUS.MBL.EDU/AD.PL?  
ZT7801 STENOBOMUYS CHRYSOPS HTTP://WWW.MBL.EDU/ANIMA

ENTITYID NAME URL  
AR1001 POMATOMUS SALTATRIX HTTP://ZEUS.MBL.EDU/AD.PL?  
ZT7801 STENOBOMUYS CHRYSOPS HTTP://WWW.MBL.EDU/ANIMA  
.....  
.....  
.....

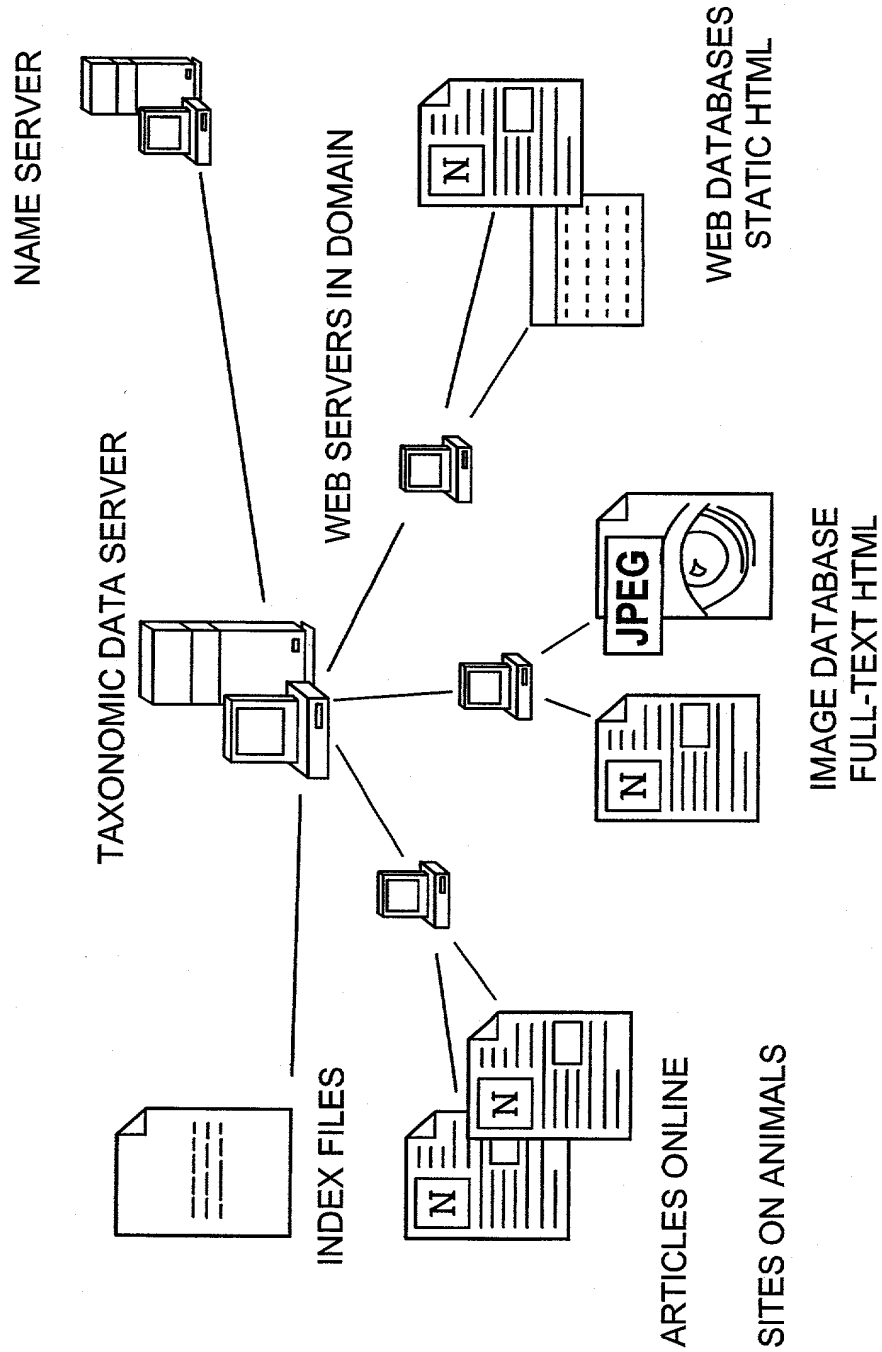


FIG. 38